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AUG 28 2006

Amendments to the Specification:

Please replace the description of FIGS. 1 and 2 on page 2 as follows:

FIG. 1 depicts a Suite of Possible 3G Signal [[Spectr]] Spectra Formed by Various Combinations of UTRA bands and CDMA-2000 Bands.

FIG. 2 shows Conventional Channelizer to Partition [[#G]] 3G Signal Set With Various Combinations of UTRA bands and [[DMDA]] CDMA-2000 Bands.

Please replace the paragraph that begins at the bottom of page 5 and ends at the top of page 6 as follows:

In an equivalent, but alternate structure, a complex band pass filter replaces the low pass filter. This filter has an impulse response formed as the product of the low pass impulse response h(n) and the up-converting complex heterodyne sequence [[exp(j(oTsn)]] exp(j 2 pi fc Ts n) of the same length. Here the heterodyne is applied to the filter to move its center frequency to the band center of the signal rather than the standard approach, which applies the heterodyne to the signal to move its

band to the filter's spectral location. In this structure, the filtering occurs at the signal's center frequency, and the output of the filter is properly band limited but still resides at the carrier center frequency. If it is desired to translate the signal spectra to base band, this down conversion can be applied after the filter as shown in figure 3b.

Please replace the single complete paragraph on page 6 as follows:

Since the signal bandwidth has been reduced by the band limiting action of the digital filter, it is common to reduce the sample rate of the down converted and filtered time series. The heterodyne following the band pass filter can be moved to the low data rate side of the down sampler. Now only the samples delivered to the output of the down sampler are subjected to the heterodyne and the workload of the heterodyne is reduced by the same M-to-1 ratio of the input to output sampling rates. The down sampling operation is thus applied to the band-centered signal. Reducing the sample rate of the carrier centered signal results in an alias induced spectral translation of the center frequency from fc with angular rotation rate of [[2(fc/fs]] <u>2 pi fc/fs</u> per sample to an angular rotation

rate of [[2(M fc/fs modulo(2()]] 2 pi M fc/fs modulo(2 pi). If the center frequency fc is any multiple of the output sample rate, say k fs/M, then the aliased rotation rate is [[2(M (k fs/M)/fs modulo(2()]] 2 pi M (k fs/M)/fs modulo(2 pi) or [[k 2(modulo(2()]] k 2 pi modulo(2 pi) which is congruent to zero, which means the output rate of rotation is zero radians per sample. For the proper choice of center frequency relative to sample rate, the down sampled data samples represent a signal that has been aliased to DC. Selection of the sample rate to be an integer multiple of the signal center frequency is one of the suggested restrictions addressed earlier. The restriction is also applicable when the ratio of sample rate to center frequency is a rational ratio of small integers.